

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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COMMISSION

In the Matter of:

AN ADJUSTMENT OF THE GAS)
AND ELECTRIC RATES, TERMS)
AND CONDITIONS OF LOUISVILLE)
GAS AND ELECTRIC COMPANY)

CASE NO: 2003-00433

REBUTTAL TESTIMONY
OF
CLAY MURPHY

DIRECTOR – GAS MANAGEMENT, PLANNING, AND SUPPLY
LOUISVILLE GAS AND ELECTRIC COMPANY

April 26, 2004

Filed: April 26, 2004

1 **Q. Please state your name and business address.**

2 A. My name is Clay Murphy and my business address is 820 West Broadway, Louisville,
3 Kentucky.

4 **Q. What position do you currently hold at Louisville Gas and Electric Company**
5 **(“LG&E”)?**

6 A. I am currently the Director – Gas Management, Planning, and Supply.

7 **Q. Have you previously filed testimony in this proceeding?**

8 A. Yes. I filed direct testimony in this proceeding on December 29, 2003, on behalf of
9 LG&E.

10 **Q. Are there any corrections you wish to make to that testimony?**

11 A. Yes. A typographical error appears at page 23, line 17. The word “over-deliveries”
12 should be “under-deliveries”.

13 **Q. What is the purpose of your testimony?**

14 A. My testimony rebuts the direct testimony filed in this proceeding by Kentucky Industrial
15 Utility Consumers, Inc. (“KIUC”) witness Richard A. Baudino, by U.S. Department of
16 Defense (“DOD”) witness, Kenneth L. Kincel, and by Attorney General (“AG”) witness
17 David H. Brown Kinloch. More specifically, my rebuttal testimony addresses the
18 following issues: (1) the modification of the proposed cash-out mechanism under Rate FT
19 and Rate TS, (2) the shortening of the notice period for the issuance of an Operational
20 Flow Order (“OFO”) under Rate FT, and (3) the impact of increased distribution charges
21 on potential bypass customers.

22

23

1 **Q. Has LG&E proposed changes to its transportation services?**

2 A. While LG&E did not propose an increase in the distribution charges for transportation
3 service under Rate FT, LG&E has proposed to modify the balancing charges for
4 transportation services to prevent subsidies by sales customers to transportation
5 customers.

6 Specifically, LG&E has proposed to modify Rate FT by:

- 7 • decreasing the notice period for issuing an OFO from 24 hours to 18 hours; and
- 8 • changing the cash-out reference price for over- or under-deliveries while otherwise
9 retaining the application of sliding scale cash-out percentages.

10 LG&E proposes to modify Rate TS by:

- 11 • changing the cash-out reference price for over-deliveries while otherwise retaining the
12 application of sliding scale cash-out percentages as it pertains to over-deliveries.

13
14 **I. MODIFICATION OF CASH-OUT MECHANISM**

15
16 **Q. What is the purpose of the cash-out mechanism?**

17 A. The cash-out mechanism has more than one purpose. One purpose is to maintain system
18 reliability by encouraging end-use transportation customers (or their pool managers) to
19 deliver volumes of gas that are matched as closely as possible to metered usage. It is
20 particularly important for transportation customers (or their pool managers) to closely
21 match delivered volumes to metered usage because LG&E does not have balancing tools
22 such as storage or transportation services dedicated to serving transportation customers.

23 When transportation customers (or their pool managers) deliver volumes over or under

1 their metered usage, the “as-available” balancing tools (storage, supply contracts, and
2 transportation services) that are in place to serve sales customers must be used to balance
3 these non-sales customers. This leads to another purpose of the cash-out mechanism
4 which is to ensure that sales customers are not bearing costs associated with providing
5 “as-available” balancing services to transportation customers.

6 **Q. Please describe the current cash-out reference price and its application to**
7 **transportation customers.**

8 A. Under Rate FT monthly over- and under-deliveries are eliminated through the application
9 of the cash-out mechanism. Under the current cash-out mechanism, over-deliveries are
10 purchased by LG&E at a price based on the monthly average of the *Gas Daily* “Dominion
11 -- South Point” price. As the level of the over-delivery increases, the price paid to the
12 customer (or pool manager) for over-deliveries decreases based on a sliding scale.
13 Conversely, under-deliveries are sold by LG&E to transportation customers (or their pool
14 managers) at a price based on the monthly average of the *Gas Daily* “Dominion -- South
15 Point” price. As the level of the under-deliveries increases, the price paid by the
16 customer (or pool manager) for under-deliveries increases based on a sliding scale.

17 Under Rate TS, which is a standby sales rate, over-deliveries are also eliminated through
18 the application of a similar cash-out mechanism, with under-deliveries “cashed-out” at
19 the applicable standby sales price.

20 **Q. Please describe the proposed cash-out reference price.**

21 A. Under LG&E’s proposal, the cash-out purchase price for over-deliveries will be the
22 lowest daily mid-point price posted in *Gas Daily* for “Dominion -- South Point” during

1 the month. The cash-out sales price for under-deliveries will be the highest daily mid-
2 point price posted in *Gas Daily* for “Dominion -- South Point” during the month.

3 **Q. Why has LG&E proposed to change the cash-out reference price?**

4 **A.** LG&E believes the current reference price is not adequate. Specifically, it does not deter
5 potential gaming of the cash-out mechanism and does not prevent subsidies between sales
6 and transportation customers. The use of the proposed cash-out reference price is
7 designed to provide a greater incentive for transportation customers and pool managers to
8 more closely match deliveries with usage. Customers and pool managers should be
9 discouraged from delivering quantities of gas that are not reflective of their requirements
10 and which ultimately increase costs to sales customers.

11 **Q. Does LG&E’s income change as a result of the proposed modification?**

12 **A.** No. Any volumes purchased or sold under the cash-out mechanisms are reflected as gas
13 costs in LG&E’s Gas Supply Clause (“GSC”) filings.

14 **Q. Please elaborate on the statement you made in your testimony that gaming is often
15 difficult to detect and nearly impossible to prove conclusively.**

16 **A.** Gaming can be difficult to detect and prove conclusively, but it is possible to detect
17 patterns of behavior by transportation customers and pool managers suggesting that
18 gaming is occurring. This is particularly the case for those customers served under Rate
19 FT and their pool managers because daily delivery and usage data is available to
20 determine these patterns of behavior.

21 **Q. In general, what “patterns of behavior” can be detected?**

22 **A.** The daily delivered volumes of a Rate FT customer or a pool manager can be compared
23 to daily metered usage each month to determine patterns of behavior. For example, this

1 daily data will indicate if a customer or pool manager is generally delivering a volume of
2 gas that is similar to its usage. This daily data will also indicate if a customer or pool
3 manager is significantly over- or under- delivering gas for one or more days during the
4 month. Accumulating the daily data indicates whether or not there were over- or under-
5 deliveries resulting in large imbalance volumes at the end of the month. Further, a review
6 of actual patterns of over- or under- deliveries in the context of price movements in the
7 natural gas market during the month can assist in determining patterns of behavior. In
8 consequence, it appears that some customers (or their pool manager) observe the daily
9 price for natural gas and compare this to the average price under the cash-out mechanism
10 in order to adjust deliveries to LG&E in such a way that they will benefit through the
11 application of the cash-out mechanism. Such benefits are ultimately created at the
12 expense of sales customers.

13 **Q. Mr. Kincel on behalf of DOD testifies that LG&E has presented no evidence that**
14 **gaming exists or has ever been attempted. Can you provide specific examples of**
15 **behavior that has occurred that indicates imbalances are being created for the**
16 **purpose of gaming the cash-out mechanism?**

17 **A.** Yes. There are two apparent potentially detrimental patterns of behavior. One pattern of
18 behavior occurs when the cash-out price for over-deliveries is less than the price to
19 purchase gas in the market. Under this scenario, the customer (or pool manager) tends to
20 under-deliver gas to LG&E rather than pay the higher market price because it can
21 purchase from LG&E the volume it under-delivered at a lower price through the cash-out
22 mechanism. The customer or pool manager benefits from lower costs, but at the expense

1 of sales customers because the gas to balance the customer or pool manager was actually
2 acquired by LG&E during the higher market price period.

3 The opposite can also happen when the cash-out price for over-deliveries is greater than
4 the price to purchase gas in the market. Under this scenario, the customer (or pool
5 manager) tends to over-deliver gas to LG&E because it will receive more than it paid for
6 the gas through the cash-out mechanism. The customer or pool manager benefits from
7 this transaction, but at the expense of sales customers who end up paying more for such
8 gas than they otherwise would have.

9 **Q. Do these “patterns of behavior” exhibit themselves in every month?**

10 A. Not necessarily. When prices do not change significantly during the month, in particular
11 if prices are not very different at the end of the month from the prices at the beginning of
12 the month, patterns of behavior either cannot be identified or fail to appear. That is
13 because there is no “incentive” to over- or under-deliver supplies during that month to
14 take advantage of the cash-out mechanism. It is also possible that the occurrence of
15 holidays or the issuance of an OFO during a month can decrease the ability of or the
16 incentive to a customer or pool manager to game the system.

17 **Q. Can you point to some months where the “patterns of behavior” that you have
18 discussed have occurred?**

19 A. Yes, let’s look at March, April, July, and August of 2003. I have included a spreadsheet
20 as CM Rebuttal Exhibit 1 for each of these months showing the activity of a particular
21 pool manager. The first column shows the day of the month; the second column shows
22 the actual daily metered usage of all the pool members; the third column shows the daily
23 volumes delivered by the pool manager to LG&E; the fourth column shows the difference

1 between the metered and delivered volumes; the fifth column shows the accumulated
2 difference between the metered and delivered volumes during the month. The sixth
3 column is the daily price posting for *Gas Daily's* "Dominion -- South Point", which is
4 used as the basis for the reference price under the current cash-out mechanism; the
5 seventh column is the running average of those daily postings over the course of the
6 month.

7 **Q. Please describe the pattern of behavior that occurred in March 2003.**

8 A. During March 2003, a pool manager over-delivered by 80,708.5 Mcf, or by about 13.1%
9 of the 616,423.0 Mcf scheduled for delivery during that month. The cash-out price for
10 the month was \$7.585, which is the average of the daily price postings for *Gas Daily's*
11 "Dominion -- South Point" during the month. The daily price postings started the month
12 at \$15.115 and ended the month at \$5.530. Through the 14th of March the delivered
13 volumes and metered usage exhibit a random pattern of over- and under-delivery.
14 Beginning on the 15th day of March it appears as if a deliberate decision was undertaken
15 to begin over-delivering gas to LG&E, even though the pool was already in an over-
16 delivered position by about 4,600 Mcf. On the 15th day of March, the daily price posting
17 was \$5.555, which was well below the running average price of \$9.831 on that same day.
18 On the 15th day of March, and every day thereafter, this pool manager delivered gas to
19 LG&E's system in excess of the metered usage of its pool members by between 2,300
20 Mcf and 6,300 Mcf per day resulting in an over-delivery of 80,708.5 Mcf. This gas,
21 which the customer (or its pool manager) may have been buying for between \$5.285 and
22 \$5.700 was purchased from the pool manager by LG&E at a significantly higher price
23 through the cash-out mechanism. Under the first tier of the cash-out mechanism, LG&E

1 paid \$7.585 (100% of the reference price of \$7.585) for 30,821.2 Mcf. Under the second
2 tier of the cash-out mechanism, LG&E paid \$6.827 (90% of the reference price of
3 \$7.585) for 30,821.2 Mcf. Under the third tier of the cash-out mechanism, LG&E paid
4 \$6.068 (80% of the reference price of \$7.585) for 19,066.1 Mcf.

5 **Q. Did the application of the various tiers of the cash-out mechanism provide adequate**
6 **incentive for this pool manager to minimize over-deliveries to LG&E?**

7 A. No. In this month, the various tiers of the cash-out mechanism did not provide adequate
8 incentive for this pool manager to minimize over-deliveries to LG&E, contrary to the
9 assertion by Mr. Kinzel in his testimony at page 22, lines 4 through 6 that it would.

10 **Q. Please explain the pattern of behavior that occurred in April 2003?**

11 A. During April 2003, one pool manager under-delivered by 7,818.6 Mcf, or by about 1.7%
12 of the 450,519.0 Mcf it delivered during that month. The cash-out price for the month
13 was \$5.798, which is the average of the daily price postings for Gas Daily's "Dominion –
14 South Point" during the month. The daily price postings started the month at \$5.670 and
15 ended the month at \$5.510. Through the 24th of April the delivered volumes and metered
16 usage exhibit a random pattern of over- and under-delivery. Beginning on the 25th of
17 April it appears as if a deliberate decision was undertaken to begin under-delivering gas
18 to LG&E, even though the pool was already in an under-delivered position by about 900
19 Mcf. On April 25th the daily price posting was \$5.920, which was above the running
20 average price of \$5.811 on that same day. On April 25th and for the next three days, this
21 pool manager under-delivered natural gas to LG&E's system in quantities of between
22 1,400 Mcf and 2,500 Mcf per day resulting in an under-delivered volume of 7,818.6 Mcf.
23 If this pool manager had purchased this gas in the market it may have paid between

1 \$5.820 and \$5.920. Instead, LG&E sold this gas to the pool manager under the first tier
2 of the cash-out mechanism for \$5.798 (100% of the reference price of \$5.798).

3 **Q. Please explain the pattern of behavior that occurred in July 2003?**

4 A. During July 2003, a pool manager over-delivered by 25,409.4 Mcf, or by about 6.1% of
5 the 419,700.0 Mcf delivered during that month. The cash-out price for the month was
6 \$5.318, which is the average of the daily postings for Gas Daily's "Dominion – South
7 Point" during the month. The daily price postings started the month at \$5.715 and ended
8 the month at \$4.940. Through the 25th of July the delivered volumes and metered usage
9 exhibit a random pattern of over- and under-delivery. Beginning on the 26th of July it
10 appears as if a deliberate decision was undertaken to begin over-delivering gas to LG&E,
11 even though the pool was already in an over-delivered position by about 15,200 Mcf. On
12 the 26th of July the daily price posting was \$4.950, which was well below the running
13 average price of \$5.389 on that same day. On the 26th of July and every day thereafter,
14 this pool manager delivered natural gas to LG&E's system in excess of the pool
15 members' usage by between 1,000 Mcf and 2,800 Mcf per day, resulting in an over
16 delivery of 25,409.4 Mcf. This gas, which the customer (or its pool manager) may have
17 been buying for between \$4.940 and \$4.965 was purchased from the pool manager by
18 LG&E at a higher price through the cash-out mechanism. Under the first tier of the cash-
19 out mechanism, LG&E purchased 20,985.0 Mcf for \$5.318 (100% of the reference price
20 of \$5.318). Under the second tier of the cash-out mechanism, LG&E purchased 4,424.4
21 Mcf for \$4.786 (90% of the reference price of \$5.318). In this case, the application of the
22 second tier of the cash-out mechanism proved an adequate incentive for this pool

1 manager to minimize over-deliveries to LG&E above the first tier of the cash-out
2 mechanism.

3 **Q. Please explain the pattern of behavior that occurred in August 2003?**

4 A. During August 2003, a pool manager over-delivered by 15,915.9 Mcf, or by about 4.1%
5 of the 390,344.0 Mcf delivered during that month. The cash-out price for the month was
6 \$5.233, which is the average of the daily postings for Gas Daily's "Dominion – South
7 Point" during the month. The daily price postings started the month at \$4.840 and ended
8 the month at \$5.085. Through the 28th of August the delivered volumes and metered
9 usage exhibit a random pattern of over- and under-delivery. Beginning on the 29th of
10 August it appears as if a deliberate decision was undertaken to begin over-delivering gas
11 to LG&E, even though the pool was already in an over-delivered position by about 5,200
12 Mcf. On the 29th of August, the daily price posting was \$5.085, which was well below
13 the running average price of \$5.244 on that same day. On the 29th of August and every
14 day thereafter, this pool manager delivered natural gas to LG&E's system in excess of the
15 pool members' usage by between 3,400 Mcf and 3,700 Mcf per day resulting in an over
16 delivery of 15,915.9 Mcf. This gas, which the customer (or its pool manager) may have
17 been buying for \$5.085 per Mcf was purchased by LG&E from the pool manager through
18 the cash-out mechanism at a higher price. Under the first tier of the cash-out mechanism,
19 LG&E purchased 15,915.9 Mcf for \$5.233 (100% of the reference price of \$5.233). In
20 this case, the application of the second tier of the cash-out mechanism proved an adequate
21 incentive for this pool manager to avoid over-deliveries to LG&E above the first tier of
22 the cash-out mechanism.

1 **Q. Do you conclude that a “pattern of behavior” can be encouraged by the current**
2 **cash-out mechanism?**

3 A. Yes. The examples discussed herein indicate that the current cash-out mechanism may
4 not adequately discourage patterns of behavior that can diminish system reliability and
5 increase costs to sales customers. It appears that the cash-out price encouraged a pool
6 manager in each of these examples to engage in a pattern of behavior in four of the twelve
7 months of the test year. This pattern of behavior resulted in either more or less gas being
8 delivered into LG&E’s system than was necessary in order to meet the actual
9 requirements of the transportation customers in the pool. This pattern of behavior caused
10 sales customers to incur higher gas costs than might have otherwise been the case absent
11 such behavior. Additionally, because LG&E does not have firm balancing tools at its
12 disposal to serve these customers, balancing tools that are in place to serve sales
13 customers must be used to serve transportation customers. Without an appropriate
14 matching of metered usage and deliveries, system reliability can be diminished.

15 **Q. Can the potential for the “patterns of behavior” described herein be mitigated by**
16 **modifying the current reference price currently incorporated in the cash-out**
17 **mechanism?**

18 A. Yes. Therefore, LG&E is requesting a change to the reference price incorporated in the
19 current cash-out mechanism for both Rate TS and Rate FT, such that the cash-out
20 purchase price for over-deliveries under Rate FT and Rate TS will be the lowest daily
21 mid-point price posted in *Gas Daily* for Dominion -- South Point during the month. If a
22 customer or pool manager has to cash-out over-deliveries at the lowest daily mid-point
23 price, it will be encouraged to mitigate over-deliveries. The cash-out sales price for

1 under-deliveries under Rate FT will be the highest daily mid-point price posted in *Gas*
2 *Daily* for “Dominion -- South Point” during the month. If a customer or pool manager
3 has to cash-out under-deliveries at the highest daily mid-point price, it will be encouraged
4 to mitigate under-deliveries. LG&E’s proposed change to the cash-out mechanism is
5 intended to protect sales customers from potential “gaming” by ensuring that
6 transportation customers (or their pool managers) do not impose costs on the system that
7 are shifted to sales customers.

8 **Q. May subsequent changes be required to the cash-out mechanism?**

9 A. LG&E will continue to monitor activity under its cash-out mechanism in order to ensure
10 that these kinds of activity are minimized and will offer further modifications for
11 Commission approval should these kinds of patterns of behavior continue.

12
13 **II. MODIFICATION OF NOTICE PERIOD FOR OPERATIONAL FLOW ORDERS**

14
15 **Q. What is an OFO?**

16 A. An OFO is an Operational Flow Order. In certain circumstances, the mismatch (or
17 imbalance) between the deliveries and usage by a Rate FT customer can jeopardize
18 LG&E’s system reliability. Through an OFO, LG&E can direct a Rate FT customer to
19 either (1) deliver to LG&E at least as much gas as it is using (typically in a potential
20 under-supply situation), or (2) use at least as much gas as it is delivering to LG&E
21 (typically in a potential over-supply situation). The current OFO notice period is twenty-
22 four (24) hours. If a customer fails to comply with the OFO directive, it is financially
23 penalized in addition to any other action which LG&E may be required to take (e.g.,

1 physically isolating and curtailing the customer if necessary to preserve system integrity).
2 The OFO charge is equal to \$15.00 per Mcf plus the mid-point price posted in *Gas Daily*
3 for "Dominion -- South Point" on the day for which the OFO was violated. All penalty
4 revenues collected through the OFO provision are returned to sales customers through the
5 Gas Supply Clause.

6 **Q. Does LG&E continue to support the shortening of the OFO notice period from 24 to**
7 **18 hours?**

8 A. Yes. As I explained in my direct testimony, LG&E is proposing to shorten the OFO
9 notice period from 24 to 18 hours in order to reflect regulatory changes in the gas
10 industry, and to increase its flexibility in issuing such OFOs when conditions exist that
11 may cause supply disruptions. When the 24-hour notice period was first introduced in
12 1995, the nomination requirements of interstate pipelines were not as flexible as they are
13 now. At that time, it was necessary to provide customers with 24-hour notice so that they
14 could modify the volume they were delivering to LG&E on the interstate pipeline within
15 the interstate pipeline's notice periods. With the implementation of certain changes by
16 the Federal Energy Regulatory Commission ("FERC"), shorter and more frequent "intra-
17 day" nomination notice periods are now available to transporters, such as LG&E's
18 transportation customers, to modify the volumes to be transported. As such, LG&E
19 proposes to reduce the OFO notice period to 18-hours in order to allow it more flexibility
20 to respond to conditions that may threaten system reliability.

21 **Q. Does LG&E's income change as a result of shortening the OFO notice period?**

22 A. No. Any revenues generated from the application of the OFO are credited to the gas
23 supply costs of sales customers through the ("GSC").

1 **Q. Mr. Kincel as witness for the Department of Defense contends that “[i]t is just too**
2 **easy to miss a key employee this late in the afternoon.” Should transportation**
3 **customers be concerned about the 18-hour notice period?**

4 A. The purpose of these changes is not to inconvenience customers but to ensure that
5 appropriate levels of reliability are maintained and that appropriate safeguards and cost
6 responsibilities are maintained.

7 Gas flows around the clock; LG&E has employees available to manage gas flows, and
8 they are accessible via pager and other electronic devices. Customers who are in the
9 business of purchasing their own gas supplies should likewise expect to maintain the
10 availability of responsible personnel. Customers subject to OFOs are requested to
11 maintain on file with LG&E an around-the-clock contact. Customers are encouraged to
12 update that information as necessary with LG&E’s Gas Supply Department. Some
13 customers do not want to manage their gas requirements and appoint an agent to do so;
14 these agents also typically maintain around-the-clock availability for the delivery of OFO
15 notices and other emergency communications. Similarly, some customers are in pools
16 and are served by pool managers. These pool managers also typically maintain around-
17 the-clock availability through pagers and other emergency communication methods for
18 the delivery of OFO notices and other emergency communications.

19 **Q. Is Mr. Kincel’s testimony with regard to the timeline for issuing OFOs correct?**

20 A. While it is a minor point, the timeline discussed by Mr. Kincel in his testimony on page
21 21, lines 14 through 16, is correct for Central Clock Time. However, LG&E operates on
22 Eastern Clock Time.

1 **Q. Mr. Kincel has stated that shortening the OFO period will cause the balancing costs**
2 **of Fort Knox to increase. Do you agree?**

3 A. As with the current OFO notice period, Fort Knox will only experience OFO charges if it
4 does not comply with the OFO. It is impossible for LG&E to predict whether or not Fort
5 Knox will be more or less likely to comply with an OFO if the notice period is changed.
6 However, as mentioned above, customers who purchase their own gas (or their agents or
7 pool managers) should be in a position to make delivery changes (within pipeline tariff
8 requirements) around the clock.

9 **Q. Mr. Baudino in his Rate FT Tariff Issues testimony at page 17, lines 20 through 22**
10 **states that: “[t]he introduction of intra-day nomination change on the interstate**
11 **pipelines does not have a direct connection to shortening the OFO notice period that**
12 **I can see”. Do you agree?**

13 A. No, the two events are related. Clearly, if the interstate pipeline was unable to accept
14 nominations and schedule changes in gas flow on an intra-day basis, it would be
15 unreasonable for LG&E to expect customers served under Rate FT to comply with a
16 notice period less than 24 hours. Since Rate FT was first established in 1995, the
17 interstate pipeline industry has more or less codified the availability of intra-day
18 nomination as I explained in LG&E’s response to Question No. 4 of the First Data
19 Request of the KIUC Dated February 3, 2004. Indeed, several customers (or their pool
20 managers) have already availed themselves of intra-day nomination capabilities. During
21 the 12 months ended September 30, 2003, LG&E received and was able to accept over 50
22 intra-day nominations.

23

1 **Q. Are there benefits to a shorter OFO notice period?**

2 A. Yes, there are benefits to both transportation and sales customers. Having a shorter
3 notice period will allow LG&E more time to evaluate the situation which is causing it to
4 consider issuing an OFO and collect more facts prior to issuing the OFO. This shorter
5 notice period may allow LG&E to avoid issuing some OFOs because it will have more
6 time to determine if the condition prompting the OFO will be delayed or not materialize.
7 For example, an extra six hours may be critical in determining whether the path of a
8 hurricane in the Gulf of Mexico is likely to cause supply disruptions. Likewise, in the
9 event of an unexpected supply disruption, LG&E will have the ability to issue an OFO in
10 a shorter time frame in an effort to balance its system and maintain system reliability. All
11 things equal, LG&E will tend to issue more OFOs rather than fewer if it is required to
12 anticipate potential supply disruptions on a 24-hour rather than 18-hour basis. The issue
13 is not whether “the current notice period contributed to situations that threatened
14 reliability”, but whether the proposed OFO time frame can enhance reliability and
15 improve service to both sales and transportation customers alike.

16 **Q. May subsequent changes be required to the OFO mechanism?**

17 A. LG&E will continue to monitor activity on its system and offer modifications for
18 Commission approval in order to maintain or enhance system reliability.

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1 **III. IMPACT ON POTENTIAL BYPASS CUSTOMERS**

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3 **Q. Mr. Brown Kinloch in his testimony at page 11, lines 20 through 23, apparently**
4 **recommends an increase of over 30% to natural gas transportation customers**
5 **served under special contracts with LG&E. Does this recommendation concern**
6 **LG&E?**

7 A. Yes. Mr. Brown Kinloch states:

8

9 Unfortunately, at a 6.42% increase the Special Contract customers still
10 are not covering the costs to serve them. This class requires a 32.95%
11 increase just to cover the cost to serve them. Even with this proposed
12 increase, this class is only covering its costs and is making no
13 contribution to fixed costs.

14

15 Mr. Seelye in Section IX of his Rebuttal Testimony (“Allocation of Gas Rate Increase”)
16 discusses the contribution that these customers are making to fixed costs.

17 **Q. Were you involved in the negotiation of LG&E’s current special contracts for**
18 **natural gas customers?**

19 A. Yes. I was involved in the negotiation of each of the special contracts with Ford Motor,
20 Fort Knox, and duPont.

21 **Q. Do you believe that Ford Motor would by-pass LG&E if its distribution charges are**
22 **increased as a result of this proceeding?**

23 A. Yes, both Ford Motor facilities are readily accessible to Texas Gas. During the course of
24 contract negotiations, Ford Motor shared with LG&E its cost estimates for the required
25 facilities to bypass LG&E and seek direct pipeline service. LG&E verified the accuracy
26 of those estimates. During the course of those negotiations, Ford Motor began the

1 process of securing right-of-way to build the line from Texas Gas to the respective plants.
2 Ford also had contacted Texas Gas for the purpose of securing a tie-in. Additionally,
3 Ford has bypassed local distribution companies in other jurisdictions, and LG&E believes
4 it very capable of doing so in Louisville. All these things convinced LG&E that Ford was
5 very serious and quite capable of physically bypassing LG&E.

6 Indeed, LG&E's submission to this Commission for its approval of the special contract
7 included an affidavit of the Ford Motor Company which states, "Absent an acceptable
8 special contract with LG&E for both Ford Kentucky Truck Plant ('KTP') and Ford
9 Louisville Assembly ('LAP'), FORD will bypass LG&E's transportation service and
10 acquire transportation service directly from an interstate pipeline for both KTP and LAP".

11 Before negotiations between LG&E and Ford Motor were concluded in 2000, Ford Motor
12 became aware that LG&E had filed a notice for an increase in base rates before this
13 Commission, although LG&E had not proposed an increase in the base rates of Ford
14 Motor. [REDACTED]

15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]

1 It is LG&E's belief that if Ford's distribution charges are increased, Ford Motor will
2 exercise its early termination option, build the bypass pipeline, and become served
3 directly by Texas Gas. The contribution which Ford is making to the fixed costs incurred
4 by LG&E is better than no contribution. LG&E believes that Ford's special contract
5 allows it to continue to contribute to those fixed costs.

6 **Q. Returning momentarily to Mr. Kincel's testimony on behalf of the Department of**
7 **Defense (Fort Knox), are there any statements in Mr. Kincel's testimony that you**
8 **would like to address?**

9 A. Yes. At page 4 (lines 7 through 9) of his testimony, Mr. Kincel makes a number of
10 statements. Specifically:

11 Regarding natural gas, LG&E receives its gas from the Texas Gas
12 Transmission System (TGT) at a connection located on the Fort Knox
13 reservation itself. This means that Fort Knox could potentially by-pass
14 LG&E completely by connecting its own distribution system to TGT
15 without leaving the base. Instead, TGT's 26 inch transmission pipeline
16 connects with two LG&E 8 inch high pressure pipelines, which then
17 travel about 3 miles, all on the Fort Knox reservation, to deliver gas to
18 Fort's Knox's own distribution system...One of the 8 inch high pressure
19 pipelines of LG&E continues off the base to service other nearby
20 customers. Fort Knox also has on its reservation the Muldraugh natural
21 gas storage field, which is leased to LG&E, and is used to provide
22 storage for Fort Knox and other customers.
23

24 Portions of this statement are inaccurate. LG&E receives gas from Texas Gas
25 Transmission, LLC ("Texas Gas") at ten different city-gate stations, one of which is
26 located on the Fort Knox Military Reservation. Texas Gas owns and operates two 26-
27 inch lines and one 30-inch line in the area, which pass through the Fort Knox Military
28 Reservation. These lines are located just over 4 miles from the two points where LG&E
29 currently delivers gas to Fort Knox. LG&E does serve Fort Knox at two different stations

1 using two 8-inch lines, but neither is directly connected to Texas Gas. Instead, these two
2 8-inch lines are fed from LG&E's transmission facilities near Fort Knox.

3 **Q. What about Mr. Kinchel's concluding statement regarding the Muldraugh storage**
4 **facility?**

5 A. LG&E converted its mineral rights acquired in about 1929 to storage field leases in 1930
6 and 1931 and began operating the Muldraugh storage field in 1931, about 10 years prior
7 to the acquisition of that land in an expansion of the Fort Knox Military Reservation.
8 LG&E's Muldraugh storage field is located under the Fort Knox Military Reservation and
9 is leased pursuant to a separate arrangement with the Bureau of Land Management, an
10 agency within the U.S. Department of the Interior.

11 Furthermore, Fort Knox receives no storage service from LG&E. Pursuant to the Special
12 Contract for Gas Transportation Service dated February 23, 1995, and approved by the
13 Commission, the last sentence of Paragraph 1 of the Special Terms and Conditions states
14 "Company [LG&E] will not be obligated to utilize its underground storage capacity for
15 purposes of this service." This is the same condition incorporated in Paragraph 2 of the
16 Special Terms and Conditions of Rate FT.

17 If Fort Knox (or indeed any other transportation customer) received storage service from
18 LG&E, transportation distribution charges would be higher than they currently are in
19 order to reflect the fact that some portion of those facilities would have been dedicated to
20 their use. As it is, transportation customers (including Fort Knox) do not have any
21 storage entitlements or receive any services from LG&E from either the Muldraugh
22 storage facility or any of LG&E's other four storage facilities.

1 **Q. Returning again to Mr. Brown Kinloch's testimony, do you believe that Fort Knox**
2 **would by-pass LG&E if its distribution charges are increased as a result of this**
3 **proceeding?**

4 A. The contract currently in place was designed to alleviate the need for Fort Knox to seek
5 service directly from Texas Gas. The current contract requires that Fort Knox may
6 terminate service effective November 1 of each year by providing notice of termination to
7 LG&E by the April 30 preceding. LG&E has been aware, and the Department of Defense
8 ("DOD") has confirmed that Fort Knox is a potential bypass candidate. Like Ford Motor,
9 Fort Knox is well situated to take advantage of its proximity to Texas Gas's interstate
10 pipeline facilities. Increasing LG&E's distribution charges to Fort Knox only increases
11 the feasibility of such bypass projects by creating the opportunity to achieve greater
12 savings as a result of direct bypass. As a result, increasing distribution charges to Fort
13 Knox increases the risk that Fort Knox may exercise its contract termination option.
14 It is LG&E's belief that if Fort Knox's distribution charges are increased, Fort Knox will
15 exercise its termination option, build the bypass pipeline, and become served directly by
16 Texas Gas. The contribution which Fort Knox is making to the fixed costs incurred by
17 LG&E is better than no contribution. LG&E believes that Fort Knox's special contract
18 allows it to continue to contribute to those fixed costs.

19 **Q. In the absence of a special contract, do you believe that duPont would have switched**
20 **from burning coal to burning natural gas?**

21 A. It is my understanding that LG&E entered into the special contract with duPont in order
22 to secure incremental natural gas system throughput. It is also my understanding that
23 duPont had indicated to LG&E that it was evaluating options for the replacement of its

1 aging coal boilers. LG&E proposed the cost-based distribution charges with demand and
2 commodity elements under which duPont is now served. The duPont distribution charges
3 include a full apportionment of the same cost components as are contained in Rates G-7
4 and FT even though LG&E was able to serve this additional load with very little
5 incremental investment. This demand/commodity rate allows duPont to achieve a lower
6 average transportation charge per Mcf because its load factor is higher than that of the
7 Rate FT class as a whole. Should that load factor deteriorate, duPont will be at risk for a
8 potentially higher average rate per Mcf.

9 Another factor considered in providing a special contract rate to duPont is the proximity
10 of duPont to transportation alternatives, specifically a line which is interconnected with
11 Texas Gas and is owned by Indiana Utilities. This facility operates in the vicinity of the
12 Rubbertown area in which duPont is located.

13 It is LG&E's belief that any increase in the transportation charges to duPont could have
14 an adverse affect on the competitiveness of natural gas as a fuel for duPont and on LG&E
15 as a transporter of that natural gas. As such, an increase in the distribution charges under
16 which LG&E serves duPont may make other fuel alternatives more competitive relative
17 to natural gas combined with LG&E's natural gas transportation service. The
18 contribution which duPont is making to the fixed costs incurred by LG&E is better than
19 no contribution. LG&E believes that duPont's special contract allows it to continue to
20 contribute to those fixed costs.

1 **IV. SUMMARY**

2

3 **Q. How would you summarize your testimony?**

4 A. LG&E believes that both of the tariff changes supported herein by LG&E will enable it to
5 continue to provide reliable gas service to both transportation and sales customers and
6 will also help to ensure that costs imposed by one class of customers are not borne by
7 other classes. Clearly, if the Commission fails to approve either one or both of these
8 modifications, it will likely be sales customers that suffer any adverse consequences.
9 Furthermore, LG&E believes that increasing the distribution charges of potential bypass
10 customers will cause them to leave the system, with the result that distribution charges
11 will ultimately increase for remaining customers.

12 **Q. Does this conclude your testimony?**

13 A. Yes, it does.

LOUISVILLE GAS AND ELECTRIC COMPANY

March 2003

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Day	Metered Usage	Delivered Volumes	Metered Minus Delivered	Accumulated Difference	Daily Price	Running Average
1	17,065.8	18,435.0	(1,369.2)	(1,369.2)	\$15.115	\$15.115
2	19,416.1	18,355.0	1,061.1	(308.1)	\$15.115	\$15.115
3	20,116.5	20,070.0	46.5	(261.6)	\$15.115	\$15.115
4	18,977.9	20,070.0	(1,092.1)	(1,353.7)	\$10.650	\$13.999
5	19,893.4	20,517.0	(623.6)	(1,977.3)	\$9.530	\$13.105
6	21,067.4	20,517.0	550.4	(1,426.9)	\$11.390	\$12.819
7	18,696.8	20,465.0	(1,768.2)	(3,195.1)	\$9.700	\$12.374
8	16,250.5	18,443.0	(2,192.5)	(5,387.6)	\$8.950	\$11.946
9	19,796.4	18,363.0	1,433.4	(3,954.2)	\$8.950	\$11.613
10	23,222.6	20,078.0	3,144.6	(809.6)	\$8.950	\$11.347
11	20,119.5	20,078.0	41.5	(768.1)	\$8.465	\$11.085
12	18,378.0	20,070.0	(1,692.0)	(2,460.1)	\$6.965	\$10.741
13	18,904.8	20,070.0	(1,165.2)	(3,625.3)	\$6.560	\$10.420
14	19,028.6	20,019.0	(990.4)	(4,615.7)	\$6.460	\$10.137
15	14,349.3	20,386.0	(6,036.7)	(10,652.4)	\$5.555	\$9.831
16	15,257.4	20,306.0	(5,048.6)	(15,701.0)	\$5.555	\$9.564
17	17,309.4	22,021.0	(4,711.6)	(20,412.6)	\$5.555	\$9.328
18	16,682.7	22,021.0	(5,338.3)	(25,750.9)	\$6.700	\$9.127
19	16,930.7	22,021.0	(5,090.3)	(30,841.2)	\$5.580	\$8.940
20	16,964.4	20,070.0	(3,105.6)	(33,946.8)	\$5.590	\$8.773
21	15,244.7	20,019.0	(4,774.3)	(38,721.1)	\$5.530	\$8.618
22	13,271.1	18,435.0	(5,163.9)	(43,885.0)	\$5.405	\$8.472
23	14,232.3	18,355.0	(4,122.7)	(48,007.7)	\$5.405	\$8.339
24	17,317.2	20,086.0	(2,768.8)	(50,776.5)	\$5.405	\$8.216
25	17,711.0	20,086.0	(2,375.0)	(53,151.5)	\$5.400	\$8.104
26	16,651.3	20,086.0	(3,434.7)	(56,586.2)	\$5.365	\$7.998
27	15,652.5	20,086.0	(4,433.5)	(61,019.7)	\$5.295	\$7.898
28	14,671.0	20,019.0	(5,348.0)	(66,367.7)	\$5.285	\$7.805
29	12,164.1	18,435.0	(6,270.9)	(72,638.6)	\$5.530	\$7.727
30	14,056.2	18,355.0	(4,298.8)	(76,937.4)	\$5.530	\$7.653
31	16,314.9	20,086.0	(3,771.1)	(80,708.5)	\$5.530	\$7.585
	535,714.5	616,423.0	(80,708.5)		\$7.585	

Percent Under- (Over-) Delivered
(Col. 4. / Col. 3)

-13.1%

LOUISVILLE GAS AND ELECTRIC COMPANY

April 2003

(1) Day	(2) Metered Usage	(3) Delivered Volumes	(4) Metered Minus Delivered	(5) Accumulated Difference	(6) Daily Price	(7) Running Average
1	15,979.9	15,739.0	240.9	240.9	\$5.670	\$5.670
2	15,837.9	15,776.0	61.9	302.8	\$5.460	\$5.565
3	14,953.3	15,801.0	(847.7)	(544.9)	\$5.400	\$5.510
4	14,059.3	15,632.0	(1,572.7)	(2,117.6)	\$5.410	\$5.485
5	13,049.2	14,140.0	(1,090.8)	(3,208.4)	\$5.505	\$5.489
6	13,868.4	13,715.0	153.4	(3,055.0)	\$5.505	\$5.492
7	17,622.8	15,805.0	1,817.8	(1,237.2)	\$5.505	\$5.494
8	19,141.4	15,775.0	3,366.4	2,129.2	\$5.780	\$5.529
9	20,339.0	15,776.0	4,563.0	6,692.2	\$6.100	\$5.593
10	19,332.6	15,801.0	3,531.6	10,223.8	\$5.910	\$5.625
11	14,922.3	15,632.0	(709.7)	9,514.1	\$5.820	\$5.642
12	11,603.0	14,140.0	(2,537.0)	6,977.1	\$5.755	\$5.652
13	13,567.4	13,715.0	(147.6)	6,829.5	\$5.755	\$5.660
14	14,331.2	15,805.0	(1,473.8)	5,355.7	\$5.755	\$5.666
15	14,602.1	15,775.0	(1,172.9)	4,182.8	\$5.640	\$5.665
16	15,395.9	15,776.0	(380.1)	3,802.7	\$6.040	\$5.688
17	16,062.3	15,801.0	261.3	4,064.0	\$6.290	\$5.724
18	12,904.7	15,632.0	(2,727.3)	1,336.7	\$5.970	\$5.737
19	10,362.9	14,140.0	(3,777.1)	(2,440.4)	\$5.970	\$5.749
20	11,148.2	13,715.0	(2,566.8)	(5,007.2)	\$5.970	\$5.761
21	15,196.8	15,805.0	(608.2)	(5,615.4)	\$5.970	\$5.770
22	16,731.6	15,775.0	956.6	(4,658.8)	\$6.005	\$5.781
23	17,694.3	15,776.0	1,918.3	(2,740.5)	\$6.080	\$5.794
24	17,941.5	14,338.0	3,603.5	863.0	\$6.090	\$5.806
25	16,661.3	14,169.0	2,492.3	3,355.3	\$5.920	\$5.811
26	14,062.1	12,676.0	1,386.1	4,741.4	\$5.820	\$5.811
27	14,149.3	12,486.0	1,663.3	6,404.7	\$5.820	\$5.812
28	16,630.0	14,341.0	2,289.0	8,693.7	\$5.820	\$5.812
29	15,695.3	14,311.0	1,384.3	10,078.0	\$5.690	\$5.808
30	14,491.6	16,751.0	(2,259.4)	7,818.6	\$5.510	\$5.798
	458,337.6	450,519.0	7,818.6		\$5.798	

Percent Under- (Over-) Delivered
(Col. 4. / Col. 3)

1.7%

LOUISVILLE GAS AND ELECTRIC COMPANY

July 2003

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Day	Metered Usage	Delivered Volumes	Metered Minus Delivered	Accumulated Difference	Daily Price	Running Average
1	14,056.3	14,230.0	(173.7)	(173.7)	\$5.715	\$5.715
2	13,063.0	14,180.0	(1,117.0)	(1,290.7)	\$5.530	\$5.623
3	11,212.4	14,195.0	(2,982.6)	(4,273.3)	\$5.305	\$5.517
4	9,634.6	11,426.0	(1,791.4)	(6,064.7)	\$5.230	\$5.445
5	7,627.1	11,480.0	(3,852.9)	(9,917.6)	\$5.230	\$5.402
6	10,619.1	12,132.0	(1,512.9)	(11,430.5)	\$5.230	\$5.373
7	12,414.9	14,201.0	(1,786.1)	(13,216.6)	\$5.230	\$5.353
8	13,588.8	14,140.0	(551.2)	(13,767.8)	\$5.600	\$5.384
9	13,188.3	13,204.0	(15.7)	(13,783.5)	\$5.780	\$5.428
10	15,467.5	13,220.0	2,247.5	(11,536.0)	\$5.890	\$5.474
11	14,235.0	13,143.0	1,092.0	(10,444.0)	\$5.645	\$5.490
12	12,873.5	11,286.0	1,587.5	(8,856.5)	\$5.480	\$5.489
13	12,620.4	11,635.0	985.4	(7,871.1)	\$5.480	\$5.488
14	14,831.3	12,732.0	2,099.3	(5,771.8)	\$5.480	\$5.488
15	14,633.6	17,061.0	(2,427.4)	(8,199.2)	\$5.430	\$5.484
16	13,827.4	17,100.0	(3,272.6)	(11,471.8)	\$5.475	\$5.483
17	12,940.8	14,189.0	(1,248.2)	(12,720.0)	\$5.280	\$5.471
18	12,001.7	14,113.0	(2,111.3)	(14,831.3)	\$5.270	\$5.460
19	10,575.4	12,632.0	(2,056.6)	(16,887.9)	\$5.290	\$5.451
20	11,032.9	13,099.0	(2,066.1)	(18,954.0)	\$5.290	\$5.443
21	13,438.7	14,195.0	(756.3)	(19,710.3)	\$5.290	\$5.436
22	14,718.9	14,135.0	583.9	(19,126.4)	\$5.385	\$5.433
23	14,838.4	13,198.0	1,640.4	(17,486.0)	\$5.340	\$5.429
24	13,585.7	13,214.0	371.7	(17,114.3)	\$5.160	\$5.418
25	15,092.9	13,138.0	1,954.9	(15,159.4)	\$5.120	\$5.406
26	11,243.1	12,632.0	(1,388.9)	(16,548.3)	\$4.950	\$5.369
27	10,330.3	13,098.0	(2,767.7)	(19,316.0)	\$4.950	\$5.372
28	12,121.1	14,195.0	(2,073.9)	(21,389.9)	\$4.950	\$5.357
29	13,015.8	14,622.0	(1,606.2)	(22,996.1)	\$4.945	\$5.343
30	12,656.3	13,686.0	(1,029.7)	(24,025.8)	\$4.965	\$5.331
31	12,805.4	14,189.0	(1,383.6)	(25,409.4)	\$4.940	\$5.318
	394,290.6	419,700.0	(25,409.4)		\$5.318	

Percent Under- (Over-) Delivered
(Col. 4. / Col. 3)

-6.1%

